

	June 14.	June 20.	June 24.	July 2.	July 9.	July 17.	July 28.	Aug. 4.	Aug. 14.	Totals.
<i>Cerura occidentalis</i>.....	..	..	..	..	..	1	1	10	3	15
“ <i>aquilonaris</i>.....	..	..	..	..	..	..	..	..	..	0
“ <i>cinerea</i>.....	..	..	..	1	1	3	..	..	1	6
“ <i>multiscripta</i>.....	..	..	..	..	..	..	..	..	1	1
<i>Platypteryx arcuata</i>.....	..	..	..	..	..	..	..	..	..	0
<i>Dryopteris rosea</i>.....	..	..	..	1	..	..	..	..	..	1
<i>Actias luna</i>.....	..	1	..	1	..	..	..	..	..	2
<i>Telea polyphemus</i>	1	1	3	9	13	7	4	14	2	54
<i>Calosamia promethea</i>.....	..	..	..	..	3	1	..	..	..	4
“ <i>angulifera</i>.....	..	..	..	..	1	..	..	..	..	1
<i>Platysamia cecropia</i>	1	3	4	23	15	3	..	..	..	49
<i>Hyperchiria io</i>	12	13	14	20	27	9	9	2	..	106
<i>Eacles imperialis</i>.....	..	2	1	5	16	7	5	4	..	40
<i>Citheronia regalis</i>.....	..	2	1	1	4	1	1	4	..	14
<i>Anisota stigma</i>	1	..	..	3	3	2	..	..	..	9
“ <i>senatoria</i>.....	..	..	..	..	..	..	..	..	..	0
<i>Dryocampa rubicunda</i>	3	..	..	3	8	8	2	2	2	28
<i>Clisiocampa americana</i>	15	508	1382	429	82	3	..	..	..	2419
“ <i>distria</i>.....	..	1	..	82	29	..	1	5	..	118
<i>Gastropacha americana</i>.....	..	..	..	1	1	..	..	..	..	2
<i>Tolype laricis</i>.....	..	..	..	..	..	..	..	..	4	4
“ <i>velleda</i>.....	..	..	..	..	..	..	..	..	..	0
<i>Prionoxystus robiniae</i>.....	..	1	1	2	2	3	..	..	1	10
Totals per visit.....	118	881	1579	1424	1199	1074	178	918	503	
Total number of moths taken.....										7874

EXPERIMENTS WITH ALPINE BUTTERFLIES.

BY SAMUEL H. SCUDDER.

Before noon on July 17 last, the morning being fair, I caged half a dozen *Oeneis semidea* ♀ on a pot of growing sedge in an open south window, in the hotel on the summit of Mount Washington, N. H. The afternoon and all the next day the mountain was enveloped in clouds, and no eggs were laid before July 20 when, by eight o'clock, a single egg was seen; during that day and the next, both of which were fair, about eight or nine eggs were laid, perhaps a

few more. July 20, at about 2 P. M., two more cages were stocked, both out of doors on growing sedge, and in one five, in the other seven females were placed. These were examined about twenty-four hours later; three eggs were found in the former, none in the latter, and all the females were replaced where the five had been, and left in the care of Mr. H. H. Lyman who remained longer on the mountain. Into the cage in the house half a dozen more

butterflies were placed on the afternoon of the 21st, and at seven o'clock the next morning this cage was taken to Cambridge and carefully examined, with the result of finding twenty-six eggs; most of these were laid on the dead last year's blades of sedge; a number were found on the wire hoops supporting the netting; still fewer on the green blades of the sedge,—perhaps four or five; one on a piece of brown paper in which the pot was wrapped, but none either on the netting, the edge of the flower-pot, or the ground.

Toward the end of July, 1887, as reported in my *New England Butterflies*, p. 146-147, I carried three females of this butterfly down the railway on Mount Washington to the base, and found them apparently affected by the change so as to be unable to fly. I thought it would be well to repeat the experiment and extend it; accordingly, when I left the mountain July 22, I did not disturb the butterflies I had placed in the cage until I reached Cambridge, or just before dark of the 22d. The butterflies were all of them affected as described by me before, but to a slightly less extent, none lying quite helpless on their side and some, after being fairly down the mountain a few hours, keeping their wings tightly closed continuously as they hung from the lace. It is possible (though I do not think it at all probable, from the nearly continuous shaking of the train) that some of the eggs mentioned were laid after leaving the summit of the mountain, but some have certainly been laid since their arrival at the seaboard,

for one was seen laid on July 23, seven were found on July 24 and twelve more on July 25. Their behavior below when attempting flight is quite the same as one finds on startling them up from the sedge toward the close of the day on the mountain; they flutter close to and in contact with the ground as if injured, and unable even with desperate efforts to get away.

It was a somewhat curious coincidence that I heard on my return that Mr. W. H. Edwards had received in West Virginia a lot of *semidea*, male and female, sent alive in a pasteboard box from Mount Washington; half were dead, but two of the females were lively and wandered about the cage in which he placed them. It is quite evident, then, that the change to a lower level does not interfere with their activities to the extent that I supposed it did.

Oenecis semidea is very abundant this year; a single larva in last stage but not quite fully grown was found under a stone on July 20.

During our stay on the mountain, Mr. Lyman and I searched in vain from the Ledge to Tuckerman's Ravine, in all its best known haunts, for *Brenthis montinus* without seeing one, and I am quite convinced that it was not on the wing. But an interesting capture was made of *Eurymus interior*, males of which, to the number of a dozen or two, were seen in the lower half of the woodless region. The only other butterflies seen above timber were *Argynnis cybele*, *Pieris rapae*, and *Euphoades glaucus*.